

Amendment to the Claims:

This Listing of the Claims Replaces all prior Versions and Listings of the Claims in the Application.

Listing of the Claims:

Claim 1 (Original): A method of packaging a group of articles into a container formed from a carton blank, the method comprising:

associating a partially erected carton blank with a group of articles, said carton blank having a top panel, a bottom panel, a first side panel, a second side panel, a plurality of unbent major flaps extending from the bottom panel, and a plurality of unbent minor flaps extending from each of the first side panel and the second side panel, wherein the first side panel and the second side panel connect the bottom panel with the top panel such that the top panel is substantially parallel with the bottom panel and is spaced from the bottom panel, and such that the first side panel is substantially parallel with the second side panel and is spaced from the second side panel ~~at least one open portion and a plurality of bendable flaps;~~

providing a vertically oriented channel having at least one deflector assembly; and

moving said associated carton blank and group vertically ~~in~~ through said channel in a single direction perpendicular to a plane defined by the bottom panel, whereby said movement results in the bending of said major ~~at least one of said~~ flaps and said minor flaps by said deflector assembly such that said carton blank is substantially fully assembled ~~at least partially assembled~~ around said group before said associated carton blank and group exit the channel.

Claim 2 (Currently Amended): The method of claim 1, wherein the associating step involves inserting the group into the a partially erected carton blank.

Claim 3 (Currently Amended): The method of claim 1, further comprising the step of placing adhesive on the partially erected carton blank ~~at least one of said flaps~~ before the partially erected carton blank is moved into the channel ~~partial assembly of the associated carton blank in said channel~~.

Claim 4 (Currently Amended): The method of claim 3, wherein said movement of the carton blank through the channel ~~also~~ results in maintaining said major flaps and said minor flaps in a bent position until said adhesive sets.

Claim 5 (Original): The method of claim 1, wherein said moving step involves moving said associated carton blank and group vertically downwardly within said channel.

Claim 6 (Original): The method of claim 1, further comprising the step of providing a ram to assist in moving said associated carton blank and group vertically along said channel.

Claim 7 (Original): The method of claim 1, wherein said deflector assembly comprises at least one of a plow assembly, a roller, a finger and a pressure saddle.

Claim 8 (Original): The method of claim 1, wherein said channel is provided with a plurality of deflector assemblies.

Claim 9 (Original): The method of claim 1, further comprising the step of providing pressure to one or more of said flaps as the associated carton blank and group moves along said channel.

Claim 10 (Original): The method of claim 9, wherein said pressure is applied by one or more vertically elongated guide members.

Claim 11 (Currently Amended): An apparatus for packaging a group of articles in a container formed from a carton blank, the apparatus comprising:

a vertical channel having first and second ends disposed along a substantially vertical longitudinal axis, the first end comprising an entrance to said channel and the second end comprising an exit from said channel, said entrance being configured to receive a partially erected carton blank associated with a group of articles, the carton blank having a top panel, a bottom panel, a first side panel, a second side panel, a plurality of unbent major flaps extending from the bottom panel, and a plurality of unbent minor flaps extending from each of the first side panel and the second side panel, wherein the first side panel and the second side panel connect the bottom panel with the top panel such that the top panel is substantially parallel with the bottom panel and is spaced from the bottom panel, and such that the first side panel is substantially parallel with the second side panel and is spaced from the second side panel having a plurality of bendable flaps; and

a deflector assembly provided along the channel, the deflector assembly operative to bend ~~at least one of said major flaps and said minor flaps~~ as the associated carton blank and group are moved in a single direction through said ~~along the vertical~~ channel such that said carton blank is substantially fully assembled around said group before said associated carton blank and group exit the channel, whereby the direction is perpendicular to a plane defined by the bottom panel ~~said bending results in at least partial assembly of said carton blank around said group.~~

Claim 12 (Original): The apparatus of claim 11, wherein the deflector assembly comprises at least one of a plow assembly, a roller, a finger, and a pressure saddle.

Claim 13 (Original): The apparatus of claim 11, wherein said channel further comprises at least two levels being vertically spaced from each other along the longitudinal axis, each level being provided with a deflector assembly.

Claim 14 (Currently Amended): A system for packaging a group of articles into a container formed from a carton blank, the system comprising:

an article grouping apparatus operative to receive articles and to arrange the articles into a predetermined group;

an associating apparatus operative to associate a partially erected carton blank with the group of articles, the carton blank having a top panel, a bottom panel, a first side panel, a second side panel, a plurality of unbent major flaps extending from the bottom panel, and a plurality of unbent minor flaps extending from each of the first side panel and the second side panel, wherein the first side panel and the second side panel connect the bottom panel with the top panel such that the top panel is substantially parallel with the bottom panel and is spaced from the bottom panel, and such that the first side panel is substantially parallel with the second side panel and is spaced from the second side panel ~~having a plurality of bendable flaps~~; and

a vertical sleeve sealer apparatus comprising a vertical channel and at least one deflector assembly associated with the channel, the channel having first and second ends disposed along a substantially vertical longitudinal axis, the first end comprising an entrance to said channel and the second end comprising an exit from said channel, said entrance being configured to receive the associated carton blank and group from the associating apparatus, said deflector assembly operative to bend said major ~~at least one of said~~ flaps and said minor flaps as the associated carton blank and group are moved in a single direction through said ~~along the vertical~~ channel such that said carton blank is substantially fully assembled around said group before said associated carton blank and group exit the channel, whereby the direction is perpendicular to a plane defined by the bottom panel ~~said bending results in at least partial assembly of said carton blank around said group.~~

Claim 15 (Original): The system of claim 14, further comprising a feed conveyor configured to provide the articles to the article grouping apparatus.

Claim 16 (Original): The system of claim 15, wherein the article grouping apparatus comprises a piston being operative to help arrange the articles into the group by displacing selected articles from the feed conveyor.

Claim 17 (Original): The system of claim 14, wherein the associating apparatus comprises a vacuum placement system.

Claim 18 (Original): The system of claim 14, wherein said at least one deflector assembly comprises at least one of a plow assembly, a roller, a finger and a pressure saddle.

Claim 19 (Original): The system of claim 14, further comprising an alignment apparatus operative to align the articles before the articles are provided to the article grouping apparatus.

Claim 20 (Original): The system of claim 14, further comprising an exit conveyor located adjacent to said exit and configured to receive the associated carton blank and group from the vertical sleeve sealer apparatus.

Claim 21 (Currently amended): The system apparatus of claim 14, wherein said channel further comprises at least two levels being vertically spaced from each other along the longitudinal axis, each level being provided with a deflector assembly.

Claim 22 (Original): The system of claim 14, further comprising at least one of a platform, a carton wrapping apparatus, a palletizer, and a pallet wrapping apparatus.

Claim 23 (Original): The system of claim 14, further comprising a control system configured to operate the vertical sleeve sealer apparatus and one or more of said article grouping and associating apparatuses.

Claims 24-25 (Canceled).

Claim 26 (New): A method of packaging a group of articles into a container formed from a carton blank, the method comprising:

associating a partially erected carton blank with a group of articles, said carton blank having a top panel, a bottom panel, a first side panel, a second side panel, a plurality of unbent major flaps extending from the bottom panel, and a plurality of unbent minor flaps extending from each of the first side panel and the second side panel, wherein the first side panel and the second side panel connect the bottom panel with the top panel such that the top panel is substantially parallel with the bottom panel and is spaced from the bottom panel, and such that the first side panel is substantially parallel with the second side panel and is spaced from the second side panel;

providing a vertically oriented channel having at least one deflector assembly; and

moving said associated carton blank and group vertically through said channel perpendicularly to a plane defined by the bottom panel such that said carton blank is substantially fully assembled and said major flaps and said minor flaps are formed closely with respect to said group before said associated carton blank and group exit the channel.

Claim 27 (New): The method of claim 26, further comprising placing adhesive on at least one of said major flaps and said minor flaps.